The Route 1&9 Corridor

Essex & Hudson Counties, New Jersey

TO NORTH JERSEY POINTS
BELLEVILLE TURNPIKE
TO PATERSON
HOBOKEN
KEARNY
THE ORANGES
NEWARK TURNPIKE
VIADUCT
HOLLAND TUNNEL
HIGH LEVEL VIADUCT UNDER CONST.
Route 10
Route 1 TONNELLE AVE.
HARRISON
SPRINGFIELD AVE.
IRVINGTON
NEWARK
SURFACE ROADWAYS
SUB-SURFACE ROAD
LINCOLN HIGHWAY
VIADUCT
ELEVATED HIGHWAY
WEST SIDE PARK
JERSEY CITY
HUDSON
NEWARK CONNECTING ROAD
UNDER CONSTRUCTION
WEEQUAHIC PARK
NEWARK AIRPORT
Route 25
BOULEVARD
HUDSON
NEWARK BAY
NEW YORK BAY
ELIZABETH
UNDER CONSTRUCTION
BAYONNE
TO SHORE POINTS, SOUTH JERSEY and PHILADELPHIA
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Holland Tunnel Approach Roads built by the New Jersey State Highway Commission

The planning and construction, begun in 1923 have been carried steadily forward. Viaduct, sub-surface highway in Jersey City, and elevated roadway by-passing Newark are completed and carrying traffic. The construction is designed to handle present day traffic and future needs of this congested Metropolitan Area.

This work is considered by engineers to be the foremost step in modern highway engineering in this country.

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September 1997

Route 1&9 Corridor

The Route 1&9 Corridor consists of a 4.75 mile long stretch of roadway which includes the entire (approximately 1.5 mile) length of the state highway designated as Route 139 together with approximately 3.25 miles of Route U.S. 1&9. The corridor is located in Hudson and Essex Counties and has a northern boundary of the Route 139 intersection with Jersey Avenue in Jersey City and a southern boundary of the southern end of the Pulaski Skyway structure, located in the City of Newark, near the intersection of Route U.S. 1&9 with Foundry Street.

For the purposes of the eligibility study, the original 13.2 mile long corridor extending from Jersey City to Elizabeth was subdivided into sections, with each section given a letter designation. The three sections at the extreme northern end of the corridor were found to have historical integrity and potential for preservation. These three sections make up the Route 1&9 Corridor and the following discussion will provide some details of their key features:

Section A

Approximate Limits: From Jersey Avenue to portal at Palisade Avenue
Approximate Length: 0.45 miles
Key Structures: 12th Street Viaduct

This section begins at the intersection with the connection of the highway to the Holland Tunnel at Jersey Avenue. The majority of the section consists of the Structure No. 0904-153, the 12th Street Viaduct. It was the first part of the route constructed and the construction plans are dated from 1925 (Figure 1 provides a copy of the original General Plan and Profile of the structure).

The viaduct is a 33 span structure which has a length of 1,702 feet. It consists of nine spans of concrete slab construction, four spans of steel deck truss construction, ten spans of steel multi-stringer construction and ten spans of steel girder and floorbeam construction. The majority of the steel spans are supported by steel columns. The steel members are encased in either concrete or gunite and support a concrete slab. The viaduct originally had concrete balustrade railings on either side of the structure.

At the other end of the section, ramps connect the main line to Hoboken Avenue and Palisade Avenue. The south ramp of the structure is also carried by an additional 14 spans of structure which consists of concrete arches with fill which are decorated at their springing points and along the vault line with pilaster caps. Also at this end of the section, a dedication plaque from 1929 is present near the Palisade Avenue Portal.

Modifications since the original construction include the construction and connection to the 14th Street Viaduct structure, the modifications and widening due to the addition of the Turnpike ramp and the removal of most of the original concrete balustrade railing.

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Section B

Approximate Limits: From portal at Palisade Avenue to overpass at JFK Boulevard
Approximate Length: 0.75 miles
Key Structures: Hoboken Avenue Viaduct
Erie (Conrail) Viaduct
JFK (Hudson County) Boulevard Overpass

This section begins at the portal to the Hoboken Avenue Viaduct at Palisade Avenue and continues to just beyond the overpass at JFK (formerly Hudson County) Avenue. Over the majority of the section the mainline roadway is at-grade but overpassed by the Hoboken Avenue Viaduct. The section was built shortly after the 12th Street Viaduct and the construction plans are dated from 1926. There are two other structures within this section, the Erie (Conrail) Railroad Viaduct and the JFK (Hudson County) Boulevard overpass.

The Hoboken Avenue Viaduct (Structure No. 0904-152) is a relatively unique feature of the corridor. It is a 190 span structure which has a length of 3,380 feet. It carries the mainline traffic in a subway type construction through Bergen Hill (Figure 2 provides a copy of the typical cross section for the original contract plans). The upper level roadway carries local traffic to and from the Holland Tunnel and accommodates local cross street traffic. The upper level is supported encased steel stringers which frame into encased steel cross girders. These cross girders are supported by a continuous concrete retaining wall on the north side of the roadway and individual concrete columns on the south side. The open area between the upper roadway and the retaining wall and the additional space between the columns and the rock cut surface are meant to provide ventilation and light to the depressed roadway. A concrete balustrade railing exists on either side of the upper level roadway as well as adjacent to the open area.

The Erie Railroad Viaduct (Structure No. 0904-151) is an eight span structure which carries the route over a deep cut which previously carried the former tracks of the Erie railroad (Figure 3 provides a copy of the elevation drawing from the original contract plans). It is an eight span structure which is 485 feet in length. It has one span with a steel deck truss type of construction as well as seven spans of steel multi-stringer construction. All of the steel is encased in concrete and the roadway has concrete balustrade railings.

The JFK (originally Hudson County) Boulevard bridge (Structure no. 0904-150) which carries the Boulevard over the Route 139 mainline roadway. It is a single span structure which has an overall length of 102 feet. It has a concrete encased multi-stringer configuration which are supported on concrete abutments and has concrete balustrade railings.

There have been minimal modifications to all three structures since their original construction with the most significant change being the partial removal of the balustrade railing on the top of the Hoboken Avenue Viaduct as well as the addition of a safety grating over a portion of the ventilator.

Section C

Approximate Limits:	From JFK Boulevard overpass to Newark end of Pulaski Skyway
Approximate Length:	3.55 miles
Key Structures:	Pulaski Skyway

The majority of this section consists of the Pulaski Skyway, which is the most significant structural element in the corridor and a major structural work in its own right. It has won awards from the American Institute of Steel Construction for its architectural qualities. The Skyway (Structure Numbers 0704-150 and 0901-150) is a 3.5 mile long low and high level steel viaduct structure of 118 spans that traverses the Hackensack and Passaic Rivers , the New Jersey Turnpike, arterial highways and local streets, railroads and industrial properties in Jersey City, Kearny and Newark. The entire structure was completed and opened to traffic in 1932.

It was originally conceived by the initial designers of the corridor to be a lower level concrete encased steel viaduct structure similar in form to the other structures in the other sections. In fact a portion of the northern low level approach in Jersey City has the same concrete encased steel spans and concrete balustrade railings as in the other viaduct structures with several of the spans built at the same time as the construction of the structures in Section B. The reason for the dramatic change in the type of construction as well as the difference in the completion dates for the various sections is due to a problem in acquiring permits from the board of Commerce and Navigation and the War Department for movable bridges with only 40 feet of clearance over the navigable channels. This conflict was resolved in 1929 with Highway Commission's decision to used the fixed span structures with a 135 foot clearance.

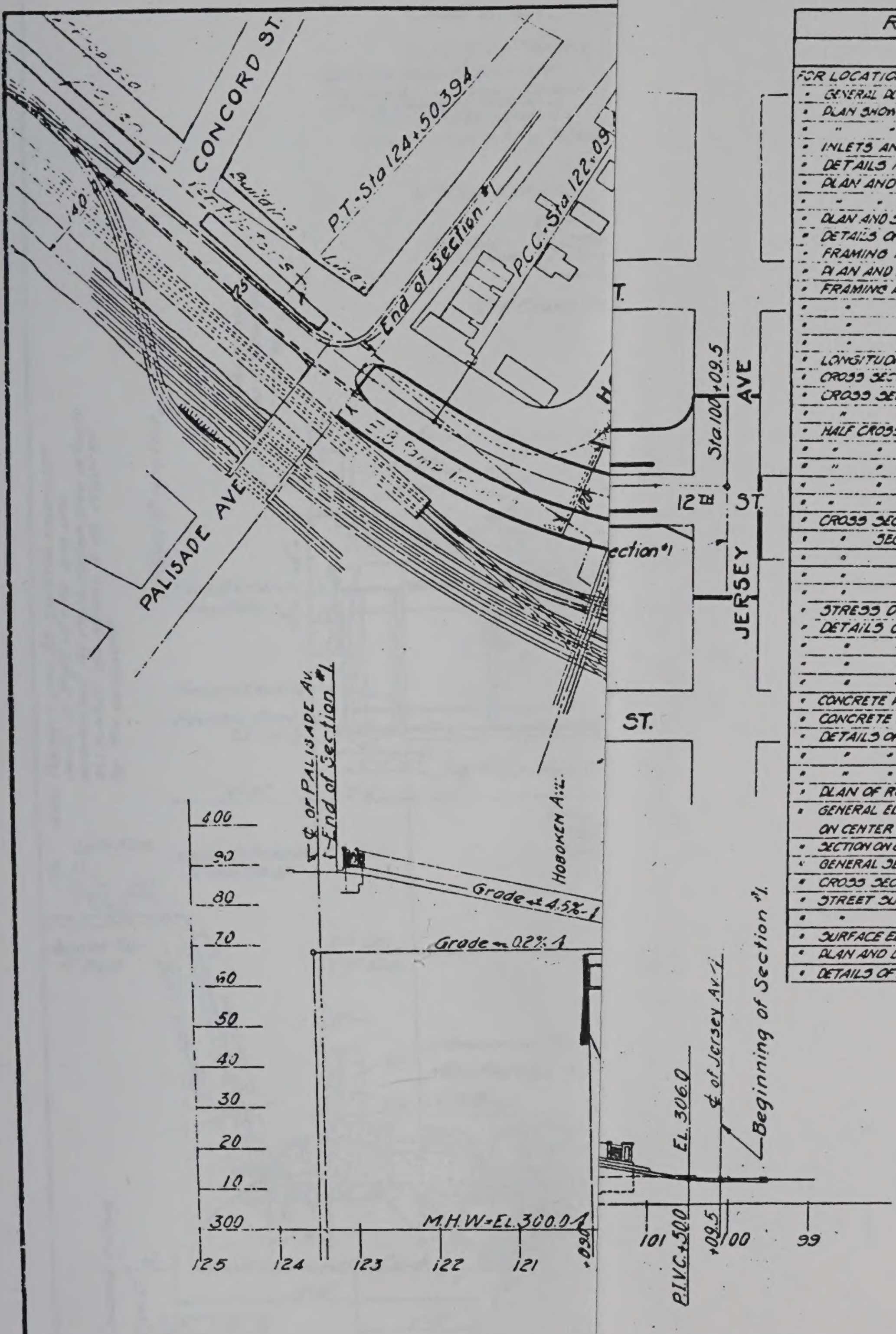
The majority of the length of the Skyway is comprised of spans with a steel deck truss configuration with the two steel cantilever through truss spans over the rivers (Figure 4 provides a copy of the three sheets showing the original general plan and elevation of these spans.) The steel high level truss spans have exposed steel beams and steel balustrade railings which are compatible in form to the concrete balustrade railings on the remaining elements.

Another significant design feature of the corridor is the center access ramps which are present in three locations in the section. (This configuration was also originally present at the Newark end of the Skyway but has been subsequently been eliminated.) The ramps were required to provide access to the highway at a limited number of points and were likely to have been a very early example of the development of such a structure.

There have only been minimal modifications to this section since its original construction. The previously mentioned decking over of the ramp at the Newark end is the most significant modification while a small portion of the concrete balustrade at the low level viaduct has been removed and replaced

FIGURES

C.S. 0904


CONCORD ST.
P.T.-Sta 124+50394
Building Lines
End of Section #1
P.C.C. Sta 122+09
140
125
PALISADE AVE
JERSEY AVE
12TH ST.
ST.
Sta 100+09.5
ection #1
℄ of Palisade Av.
End of Section #1
Hoboken Av.
Grade + 4.5%
Grade - 0.2%
El. 306.0
℄ of Jersey Av.
Beginning of Section #1
M.H.W. El. 300.0
P.I.V.C.+500
+09.5
400
90
80
70
60
50
40
30
20
10
300
125
124
123
122
121
101
100
99

REFERENCE DRAWINGS

TITLE		
FOR LOCATION MAP		
" GENERAL PLAN AND LONGITUDINAL SECTION		
" PLAN SHOWING SUBSURFACE STRUCTURES & DETAILS	"	C-104
" " " " " "	"	C-105
" INLETS AND DRAINS	"	C-106
" DETAILS FOR RETAINING WALLS	"	C-107
" PLAN AND SECTIONS OF PILE FOUNDATIONS	"	C-108
" " " " " "	"	C-109
" PLAN AND SECTIONS. CAISSON FOUNDATIONS & PIERS	"	C-110
" DETAILS OF CAISSON FOUNDATIONS	"	C-111
" FRAMING PLAN AND LONGITUDINAL SECTION	"	C-112
" PLAN AND SECTIONS. VIADUCT STRUCTURAL STEEL	"	C-113
" FRAMING PLAN AND LONGITUDINAL SECTION	"	C-114
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" " " " " "	"	C-116
" " " " " "	"	C-117
" LONGITUDINAL SECTION	"	C-118
" CROSS SECTIONS AT BENTS 22-28-29-30-31 & 32	"	C-119
" CROSS SECTION. BENT #9	"	C-120
" " " " #10	"	C-121
" HALF CROSS SECTION, BENT #12 & DETAILS OF CROSS FRAMES	"	C-122
" " " " " #13	"	C-123
" " " " " #14-16-18-15-17 & E. SIDE BENT #19	"	C-124
" " " " " #20	"	C-125
" " " " " #21 & W. SIDE BENT #19	"	C-126
" CROSS SECTIONS A-A AND B-B	"	C-127
" " SECTION C-C	"	C-128
" " " D-D	"	C-129
" " " E-E AND G-G	"	C-130
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" STRESS DIAGRAMS FOR TRUSSES	"	C-132
" DETAILS OF TRUSSES	"	C-133
" " " "	"	C-134
" " " COLUMN BASES	"	C-135
" " " FLAT SLAB CONSTRUCTION	"	C-136
" CONCRETE PROTECTION DETAILS AT BENT #9	"	C-137
" CONCRETE RAILING, FLOOR SLABS ETC.	"	C-138
" DETAILS OF PROTECTION FOR STEEL (TRUSSES)	"	C-139
" " " " " " (GIRDERS)	"	C-140
" " " REINFORCEMENT	"	C-141
" PLAN OF ROADWAY AND RAMPS	"	C-142
" GENERAL ELEVATION OF ROADWAY & RAMP, & SECTION ON CENTER LINE OF SOUTH RAMP. (ABUTMENT END)	"	C-143
" SECTION ON CENTER LINE OF SOUTH RAMP (WEST END)	"	C-144
" GENERAL SECTIONS OF RAMPS AND ROADWAY	"	C-145
" CROSS SECTIONS OF SOUTH RAMP	"	C-146
" STREET SURFACE ELEVATIONS	"	C-147
" " " " AND DETAIL OF WHEEL GUARDS	"	C-148
" SURFACE ELEVATIONS OF ROADWAY AND RAMPS	"	C-149
" PLAN AND DETAILS OF LIGHTING SYSTEM	"	C-150
" DETAILS OF LIGHTING SYSTEM	"	C-151

NEW JERSEY
STATE HIGHWAY DEPT.
ROUTE No. 1 EXTENSION

SUPPLEMENTAL
GENERAL PLAN & PROFILE
FOR INSURANCE VALUES.
DATE OCT. 5 1925

SECTION No. 1.
DRAWING C-102 OF DRAWINGS

TRACED BY M.S.S.
CHECKED BY
APPROVED
APPROVED
SCALE As Shown

SUBMITTED FOR APPROVAL J. S. [illegible]
RECOMMENDED FOR APPROVAL
CONSTRUCTION ENGR.
APPROVED
STATE HIGHWAY E
FILE No.

Figure 1

C.S. 0904

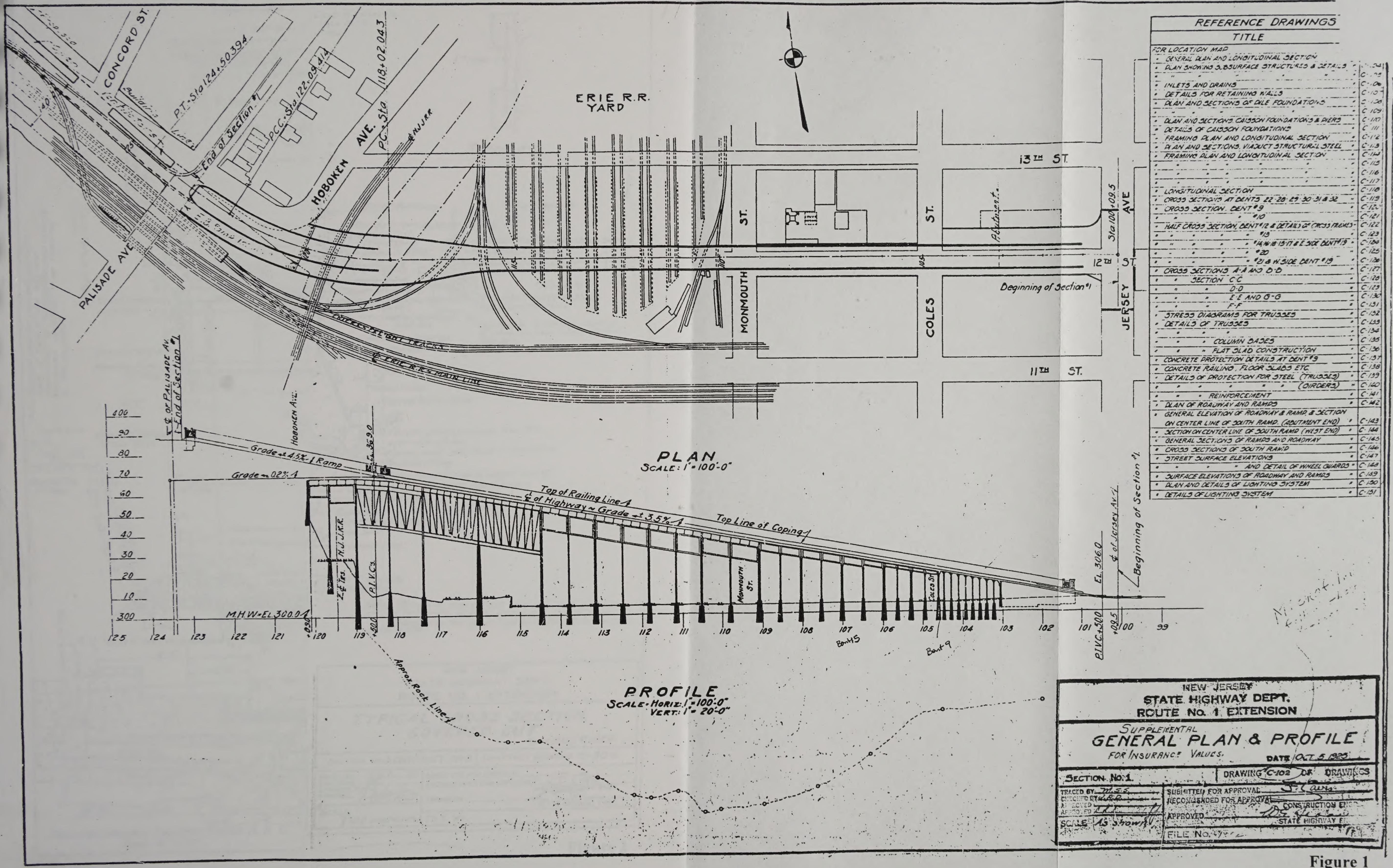
CONCORD ST.
PT-Sta 124+50.39
End of Section #1
P.C.C.-Sta 122+09.414
HOBOKEN AVE.
P.C.-Sta 118+02.043
N.J.J.R.R.
PALISADE AVE.
ERIE R.R. YARD
13TH ST.
12TH ST.
11TH ST.
MONMOUTH ST.
COLES ST.
JERSEY AVE
Sta 100+09.5
Abutment
Beginning of Section #1
ERIE'S FREIGHT TRACKS
℄ ERIE R.R.'S MAIN LINE
PLAN
SCALE: 1"=100'-0"
℄ of Palisade Av. ℄ End of Section #1
Hoboken Av.
El. 359.0
Grade + 4.5% Ramp
Grade - 0.2%
Top of Railing Line
℄ of Highway - Grade + 3.5%
Top Line of Coping
N.J.J.R.R.
P.I.V.C.
Monmouth St.
Coles St.
El. 306.0
℄ of Jersey Av.
Beginning of Section #1
P.I.V.C.+300
+09.5
M.H.W.=El.300.0
400
90
80
70
60
50
40
30
20
10
300
125
124
123
122
121
120
119
118
117
116
115
114
113
112
111
110
109
108
107
106
105
104
103
102
101
100
99
Bent 15
Bent 9
Approx. Rock Line
PROFILE
SCALE-HORIZ: 1"=100'-0"
VERT: 1"=20'-0"

Figure 1

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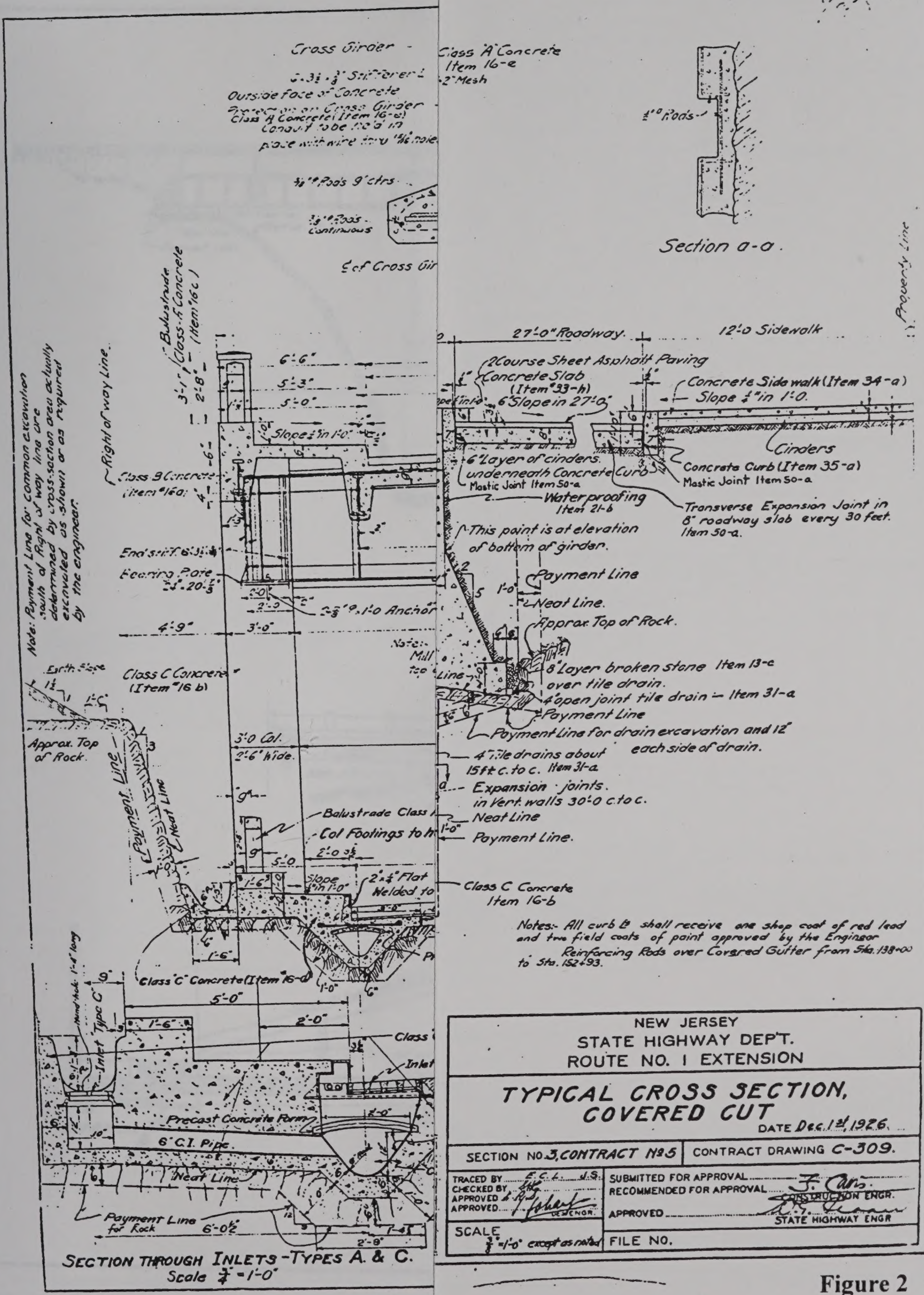
NEW JERSEY
STATE HIGHWAY DEPT.
ROUTE No. 1 EXTENSION

SUPPLEMENTAL
GENERAL PLAN & PROFILE
FOR INSURANCE VALUES.
DATE OCT. 5 1925

SECTION No. 1.
DRAWING C-102 OF DRAWINGS

TRACED BY M.S.S.
CHECKED BY L.B.P.
[illegible]
APPROVED [illegible]
SCALE As Shown

SUBMITTED FOR APPROVAL J. Cairns
RECOMMENDED FOR APPROVAL
CONSTRUCTION ENGR.
APPROVED
STATE HIGHWAY ENGR.
FILE No.


Cross Girder
Class 'A' Concrete
Item 16-e
2" Mesh
Outside face of Concrete
Class 'A' Concrete (Item 16-a)
Conduit to be placed in place with wire thru 1/16" hole.
Rods 9" ctrs.
Rods Continuous
℄ of Cross Gir
Rods
Section a-a.
Property Line
Balustrade Class-A Concrete (Item 16c)
3'-1"
2'-8"
6'-6"
5'-3"
5'-0"
Slope ¼" in 1'-0"
Right of way Line.
Note: Payment Line for common excavation south of Right of way line are determined by cross-section area actually excavated as shown or as required by the engineer.
Class B Concrete (Item 16a)
End stiff.
Bearing Plate
2'-0"
2'-3"
1'-0" Anchor
4'-9"
3'-0"
Earth Slope
1½
1'-5"
Class C Concrete (Item 16 b)
Approx. Top of Rock.
Payment Line
Neat Line
3'-0 Col.
2'-6" Wide.
Balustrade Class
Col Footings to
5'-0
2'-0
1'-6
Slope ¼" in 1'-0"
2" x ¼" Flat Welded to
Class 'C' Concrete (Item 16-b)
1'-6"
1'-0"
27'-0" Roadway.
12'-0 Sidewalk
2 Course Sheet Asphalt Paving
Concrete Slab (Item 33-h)
6" Slope in 27'-0"
Concrete Sidewalk (Item 34-a)
Slope ¼" in 1'-0.
Cinders
6" Layer of cinders underneath Concrete Curb
Mastic Joint Item 50-a
Concrete Curb (Item 35-a)
Mastic Joint Item 50-a
Waterproofing Item 21-b
Transverse Expansion Joint in 8" roadway slab every 30 feet. Item 50-a.
This point is at elevation of bottom of girder.
Payment Line
1'-0"
Neat Line.
Approx. Top of Rock.
8" Layer broken stone Item 13-c over tile drain.
4" open joint tile drain - Item 31-a
Payment Line
Payment Line for drain excavation and 12" each side of drain.
4" Tile drains about 15 ft c. to c. Item 31-a
Expansion joints. in Vert. walls 30'-0 c. to c.
Neat Line
Payment Line.
Class C Concrete Item 16-b
Notes:- All curb & shall receive one shop coat of red lead and two field coats of paint approved by the Engineer
Reinforcing Rods over Covered Gutter from Sta. 138+00 to Sta. 152+93.
9"
Inlet Type C
5'-0"
2'-0"
1'-6"
Class
Inlet
Precast Concrete Form
6" C.I. Pipe.
Neat Line
Payment Line for Rock
6'-0½"
2'-8"
SECTION THROUGH INLETS - TYPES A. & C.
Scale ¾" = 1'-0"

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 1 EXTENSION

TYPICAL CROSS SECTION,
COVERED CUT

DATE Dec. 1st, 1926.

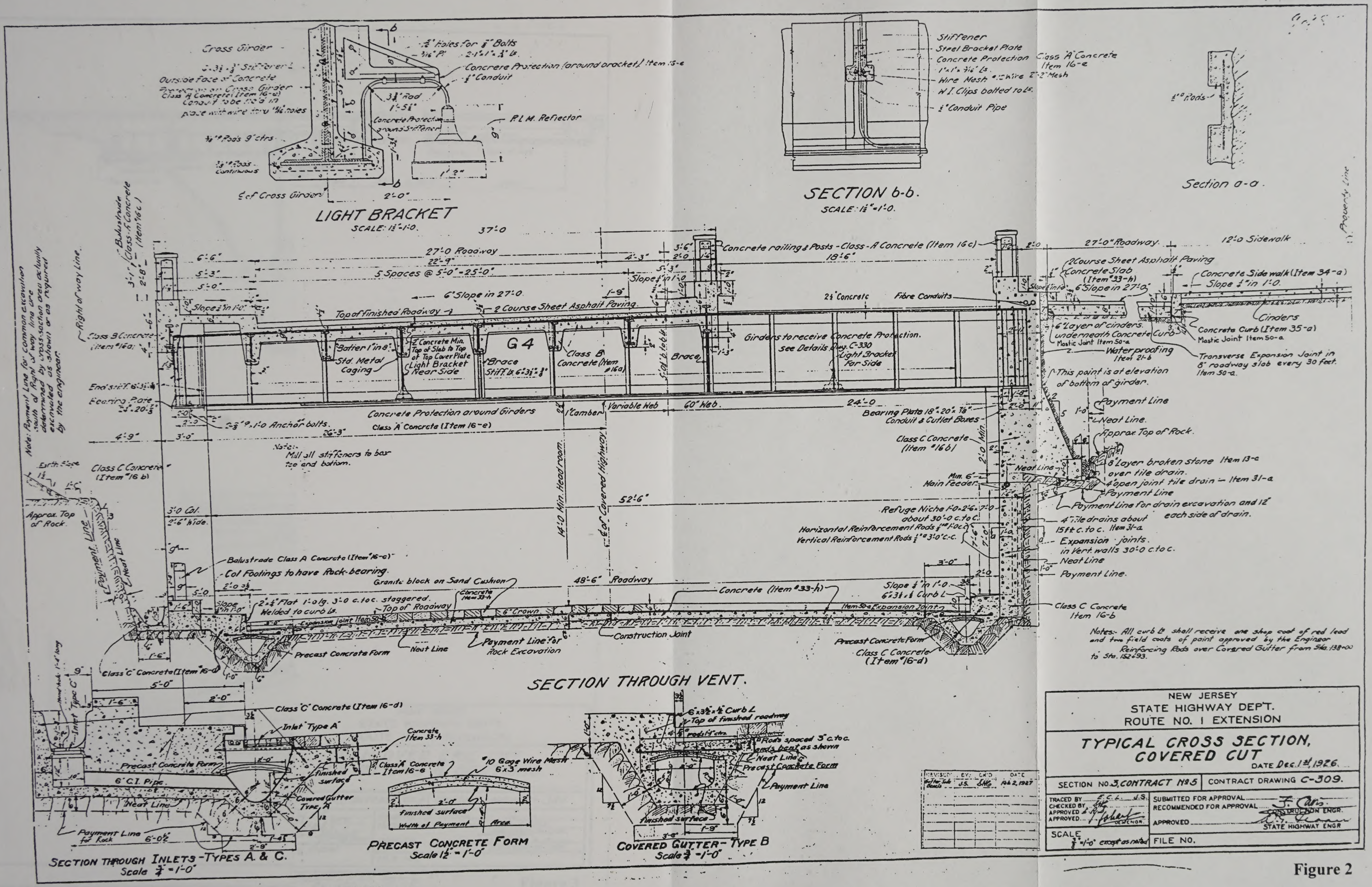
SECTION NO. 3, CONTRACT NO. 5 | CONTRACT DRAWING C-309.

TRACED BY E.C.L. J.S.
CHECKED BY
APPROVED
APPROVED
DESIGNOR

SUBMITTED FOR APPROVAL
RECOMMENDED FOR APPROVAL F. Carr CONSTRUCTION ENGR.
APPROVED STATE HIGHWAY ENGR

SCALE ⅜" = 1'-0" except as noted
FILE NO.

Figure 2


LIGHT BRACKET
SCALE: 1½"-1'-0.
Cross Girder
Outside face of Concrete Protection on Cross Girder Class A Concrete (Item 16-e)
Conduit to be tie'd in place with wire thru 5/16" holes
½" holes for ⅜" Bolts
3/16" Pl.
2-1½"×1"×⅛" Ls.
Concrete Protection (around bracket) Item 16-e
½" Conduit
3½" Rod 1'-5½"
Concrete Protection around Stiffener
R.L.M. Reflector
⅜" Rods 9" ctrs
⅜" Rods continuous
℄ of Cross Girder
2'-0"
1'-2"
SECTION b-b.
SCALE: 1½"=1'-0.
Stiffener
Steel Bracket Plate
Concrete Protection Class A Concrete Item 16-e
1"×1"×3/16" Ls.
Wire Mesh Wire 2"×2" Mesh
W.I. Clips bolted to Ls.
½" Conduit Pipe
Section a-a.
½" Rods
Property Line
37'-0
27'-0 Roadway
22'-9"
5 Spaces @ 5'-0"=25'-0"
6'-6"
5'-3"
5'-0"
Balustrade Class A Concrete (Item 16c)
Right of way Line.
Note: Payment Line for common excavation south of Right of way line are determined by cross section area actually excavated as shown or as required by the engineer.
Slope ¼" in 1'-0"
6" Slope in 27'-0
Top of finished Roadway
2 Course Sheet Asphalt Paving
Class B Concrete (Item 16a)
Batter 1" in 8"
Std. Metal Caging
2" Concrete Min. Top of Slab to Top of Top Cover Plate
Light Bracket Near Side
G 4
Brace
Stiff. Ls. 6×3½×⅜"
Class B Concrete (Item 16a)
End stiff.
Bearing Plate
⅞" × 1'-0 Anchor bolts.
Concrete Protection around Girders
Class A Concrete (Item 16-e)
1" Camber
Variable Web
60" Web.
26'-3"
4'-9"
3'-0"
Note: Mill all stiffeners to bear top and bottom.
Earth Slope
Class C Concrete (Item 16 b)
Approx. Top of Rock.
3'-0 Col. 2'-6" wide.
14'-0 Min. Head room.
℄ of Covered Highway
52'-6"
Payment Line
Neat Line
Balustrade Class A Concrete (Item 16-c)
Col Footings to have Rock-bearing.
Granite block on Sand Cushion
48'-6" Roadway
2"×¼" Flat 1'-0 lg. 3'-0 c.to c. staggered. Welded to curb Ls.
Top of Roadway
Concrete Item 33-h
6" Crown
Expansion joint Item 50
Neat Line
Payment Line for Rock Excavation
Construction Joint
Precast Concrete Form
Class C Concrete (Item 16-d)
Concrete railing & Posts - Class - A Concrete (Item 16c)
18'-6"
3'-6"
2'-0
5'-3"
4'-3"
1'-9"
2½" Concrete
Fibre Conduits
Girders to receive Concrete Protection. See Details Dwg. C-330
Light Bracket Far Side
24'-0
Bearing Plate 18"×20"×⅞"
Conduit & Outlet Boxes
Class C Concrete (Item 16b)
2'-0 Min.
Min. 6"
Main Feeder
Neat Line
Refuge Niche 1'-0×2'-6×7'-0 about 30'-0 c.to c.
Horizontal Reinforcement Rods ½" 1'-0 c.c.
Vertical Reinforcement Rods ½" 3'-0" c.-c.
3'-0"
2'-0
Slope ¼" in 1'-0.
6"×3½×½ Curb L
Item 50-a Expansion Joint
Concrete (Item 33-h)
Precast Concrete Form
Class C Concrete (Item 16-d)
27'-0" Roadway
12'-0 Sidewalk
2 Course Sheet Asphalt Paving
Concrete Slab (Item 33-h)
6" Slope in 27'-0"
Concrete Sidewalk (Item 34-a)
Slope ¼" in 1'-0.
Cinders
6" Layer of cinders underneath Concrete Curb
Mastic Joint Item 50-a
Concrete Curb (Item 35-a)
Mastic Joint Item 50-a
Waterproofing Item 21-b
Transverse Expansion Joint in 8" roadway slab every 30 feet. Item 50-a.
This point is at elevation of bottom of girder.
Payment Line
Neat Line.
Approx. Top of Rock.
8" Layer broken stone Item 13-c over tile drain.
4" open joint tile drain — Item 31-a
Payment Line
Payment Line for drain excavation and 12" each side of drain.
4" Tile drains about 15 ft c. to c. Item 31-a
Expansion joints in Vert. walls 30'-0 c.to c.
Neat Line
Payment Line.
Class C Concrete Item 16-b
SECTION THROUGH VENT.
Inlet "Type C"
9"
5'-0"
2'-0"
1'-6"
Class "C" Concrete (Item 16-d)
Inlet "Type A"
Concrete Item 33-h
Precast Concrete Form
6" C.I. Pipe
Neat Line
finished surface
Covered Gutter Type A
Payment Line for Rock
6'-0½"
2'-9"
SECTION THROUGH INLETS - TYPES A. & C.
Scale ¾"=1'-0"
Class A Concrete Item 16-e
#10 Gage Wire Mesh 6"×3" mesh
2'-0"
finished surface
Width of Payment Area
PRECAST CONCRETE FORM
Scale 1½"=1'-0"
6"×3½"×½" Curb L
Top of finished roadway
Rods spaced 3" c.to c. ends bent as shown
Neat Line
Precast Concrete Form
Payment Line
finished surface
3'-0"
1'-9"
COVERED GUTTER - TYPE B
Scale ¾"=1'-0"

Notes:- All curb Ls shall receive one shop coat of red lead and two field coats of paint approved by the Engineer.
Reinforcing Rods over Covered Gutter from Sta. 138+00 to Sta. 152+93.

REVISED	BY	CH'D	DATE
Gutter Sub Details	J.S.	G.H.G.	Feb 2, 1927

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 1 EXTENSION

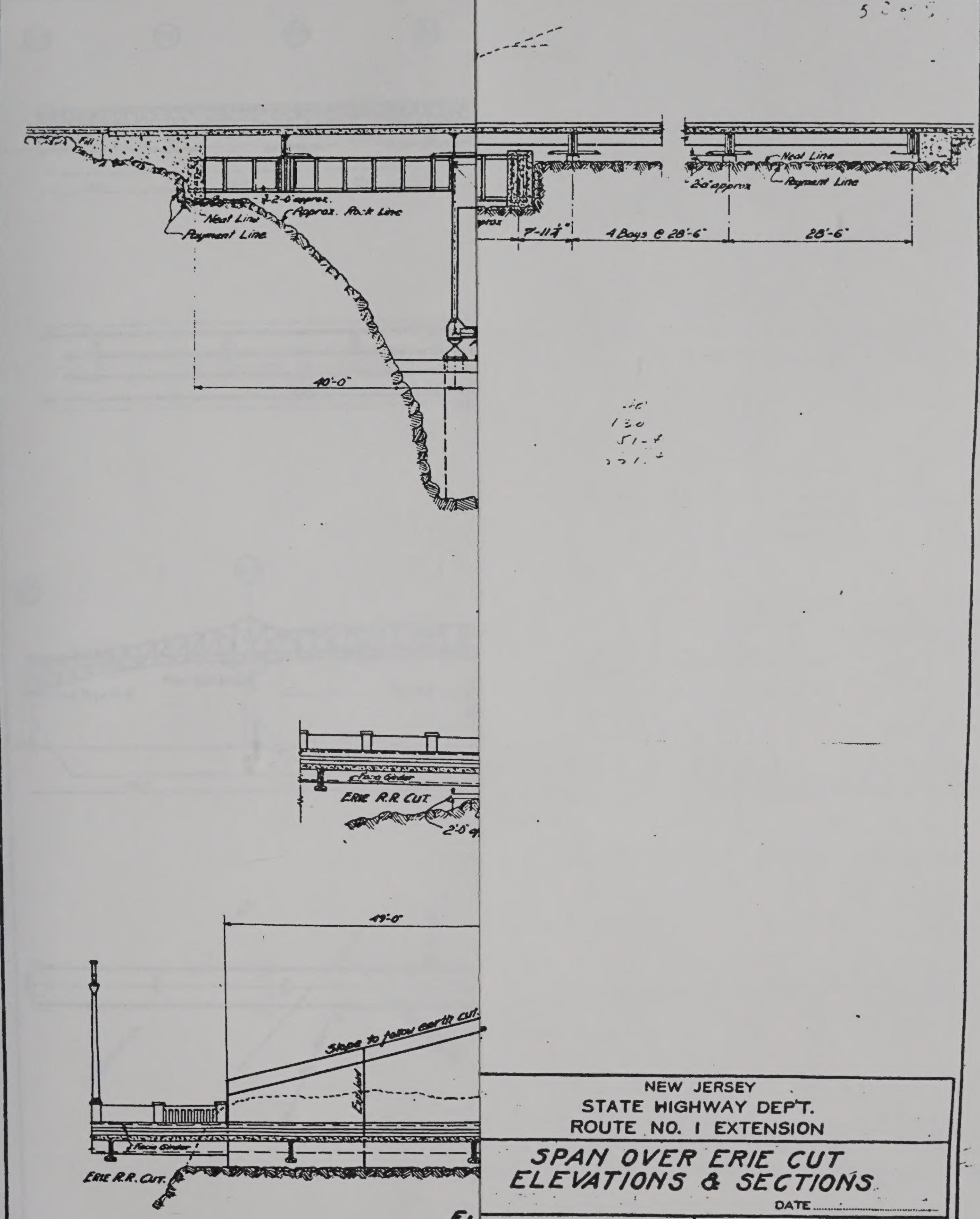
TYPICAL CROSS SECTION,
COVERED CUT
DATE Dec. 1st, 1926.

SECTION NO. 3, CONTRACT No. 5
CONTRACT DRAWING C-309.

TRACED BY E.C.L. J.S.
CHECKED BY G.H.G.
APPROVED
APPROVED DESIGN ENGR.
SUBMITTED FOR APPROVAL
RECOMMENDED FOR APPROVAL J. Cass CONSTRUCTION ENGR.
APPROVED STATE HIGHWAY ENGR
SCALE ⅜"=1'-0" except as noted
FILE NO.

Figure 2

C.S 0404


Fill
2-0 approx.
Neat Line
Approx. Rock Line
Payment Line
40'-0"
7'-11¼"
4 Bays @ 28'-6"
28'-6"
Neat Line
2'-0" approx
Payment Line
130
51-4
Face Girder
ERIE R.R. CUT
2'-0" ap
19'-0"
Slope to follow earth cut
Existing
Face Girder
ERIE R.R. CUT
EL

NEW JERSEY
STATE HIGHWAY DEPT.
ROUTE NO. 1 EXTENSION

SPAN OVER ERIE CUT
ELEVATIONS & SECTIONS

DATE

CTION NO. 3, CONTRACT No 5

CONTRACT DRAWING C- 344

BY E.P.
D BY
ED
ED.
BD ENGR.

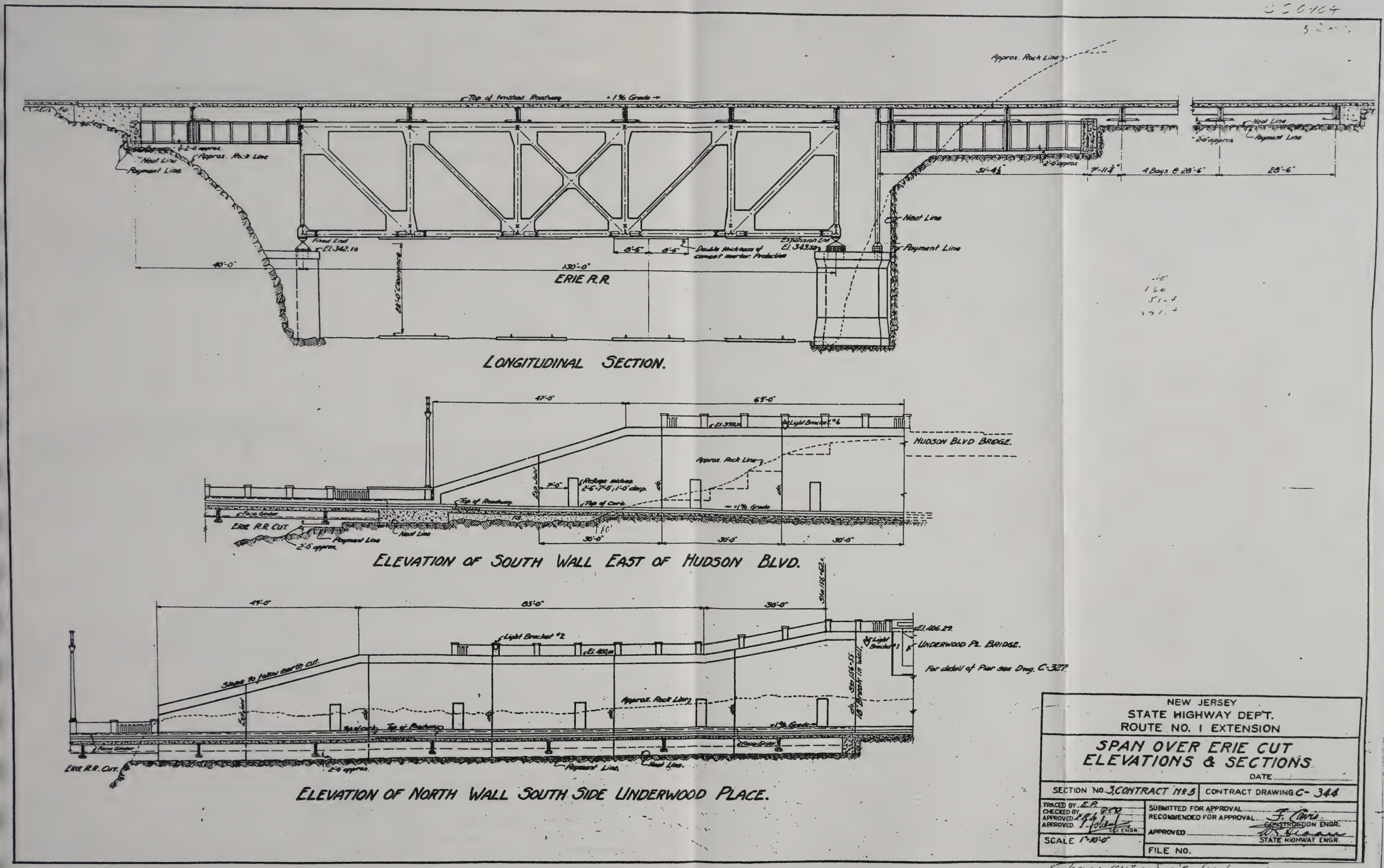
E 1"=10'-0"

SUBMITTED FOR APPROVAL
RECOMMENDED FOR APPROVAL F. Cavis.
CONSTRUCTION ENGR.
APPROVED
STATE HIGHWAY ENGR.

FILE NO.

Span over Erie Cut

Figure 3


Top of finished Roadway
+1% Grade →
Fill
2-2-0" approx.
Approx. Rock Line
Neat Line
Payment Line
Fixed End
El. 342.10
40'-0"
130'-0"
ERIE R.R.
28'-0" Clearance
6'-5"
6'-5"
Double thickness of cement mortar. Protection
Expansion End
El. 343.38
Approx. Rock Line
Neat Line
Payment Line
51'-4½"
2'-0" approx.
7'-11¾"
4 Bays @ 28'-6"
28'-6"
2'-0" approx.
LONGITUDINAL SECTION.
47'-0"
69'-0"
El. 398.
Light Bracket #6
HUDSON BLVD BRIDGE.
Approx. Rock Line
Exp. Joint
2'-0"
Relief niches 2'-6" × 7'-0"; 1'-0" deep.
Top of Roadway
Top of Curb
+1% Grade
Face Girder
Fill
ERIE R.R. CUT.
Neat Line
Payment Line
2'-0" approx.
30'-0"
30'-0"
30'-0"
ELEVATION OF SOUTH WALL EAST OF HUDSON BLVD.
Sta. 156+62.
49'-0"
65'-0"
30'-0"
Light Bracket #2
El. 400.
El. 406.29.
Light Bracket #1
UNDERWOOD PL. BRIDGE.
For detail of Pier see Dwg. C-327.
Slope to follow earth cut.
Exp. Joint
Approx. Rock Line
Sta. 156+55.
18" Breach in Wall.
Top of Curb
Top of Roadway
+1% Grade
Face Girder
ERIE R.R. CUT.
2'-0" approx.
Payment Line.
Neat Line.
ELEVATION OF NORTH WALL SOUTH SIDE UNDERWOOD PLACE.

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 1 EXTENSION

SPAN OVER ERIE CUT
ELEVATIONS & SECTIONS

DATE ....

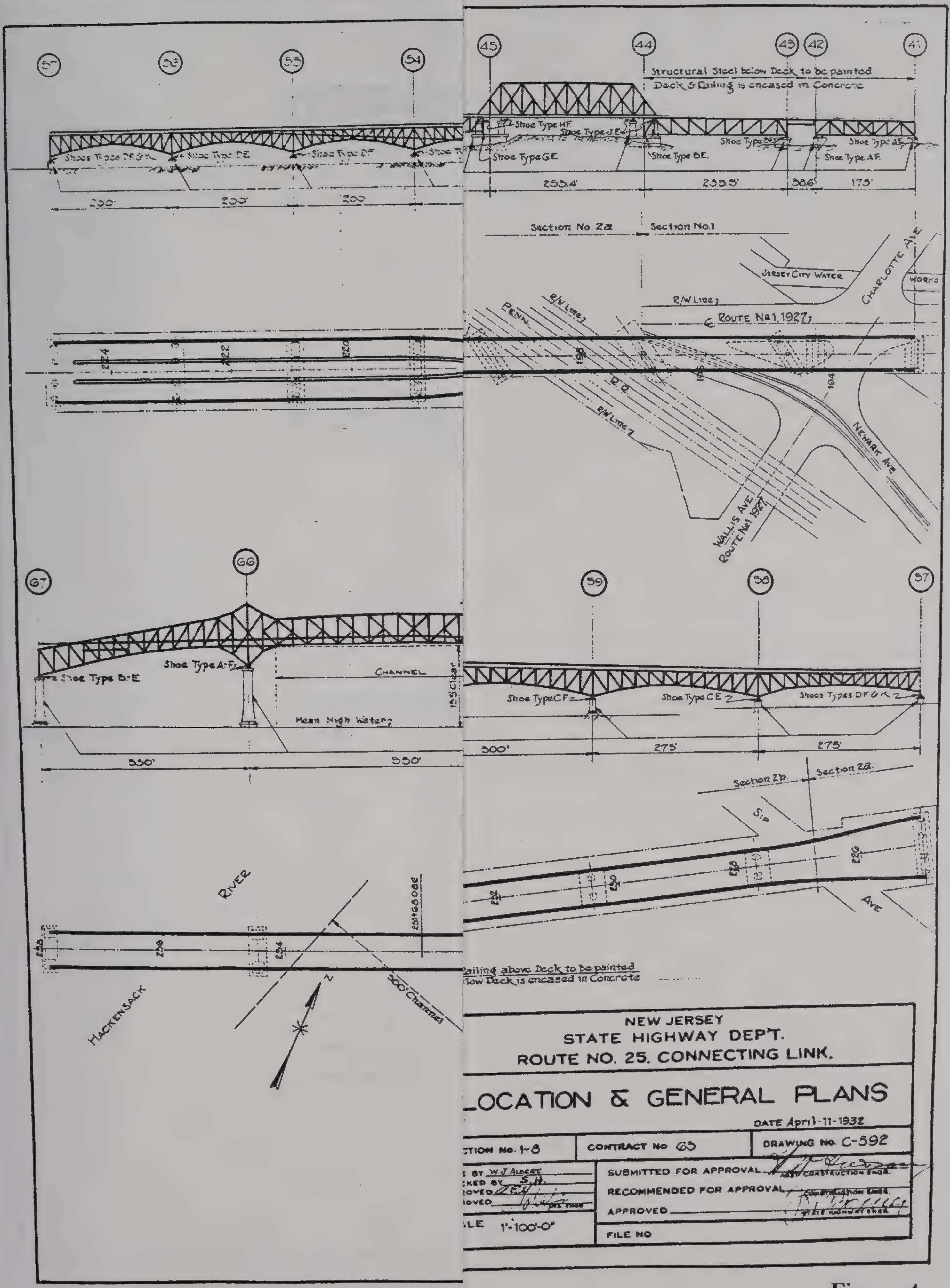
SECTION NO. 3, CONTRACT No. 5 | CONTRACT DRAWING C- 344

TRACED BY E.P.
CHECKED BY R.E.R.
APPROVED
APPROVED P. Foley
DES. ENGR.
SCALE 1"=10'-0"

SUBMITTED FOR APPROVAL
RECOMMENDED FOR APPROVAL F. Cavis
CONSTRUCTION ENGR.
APPROVED
STATE HIGHWAY ENGR.
FILE NO.

Span over Erie Cut
Elevations & Sections

Figure 3


57
56
55
54
45
44
43
42
41
Structural Steel below Deck to be painted
Deck & Railing is encased in Concrete
Shoes Types DF & K
Shoe Type DE
Shoe Type DF
Shoe Type HF
Shoe Type J.E
Shoe Type GE
Shoe Type BE
Shoe Type DF
Shoe Type AE
Shoe Type AF
200'
200'
200
255.4'
235.5'
38.6'
175'
Section No. 2a
Section No. 1
Jersey City Water
Charlotte Ave
Works
R/W Line
R/W Line
R/W Line
Route No. 1, 1927
Penn. R.R.
Newark Ave
Wallis Ave
Route No. 1, 1927
224
222
220
196
195
104
67
66
59
58
57
Shoe Type B-E
Shoe Type A-F
Channel
135' Clear
Mean High Water
Shoe Type CF
Shoe Type CE
Shoes Types DF & K
550'
550'
300'
275'
275'
Section 2b
Section 2a
Sip
Ave
River
Hackensack
Z
N
258
256
254
251+68.08 BE
232
230
228
226
300' Channel
Railing above Deck to be painted
Below Deck is encased in Concrete

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 25. CONNECTING LINK.

LOCATION & GENERAL PLANS

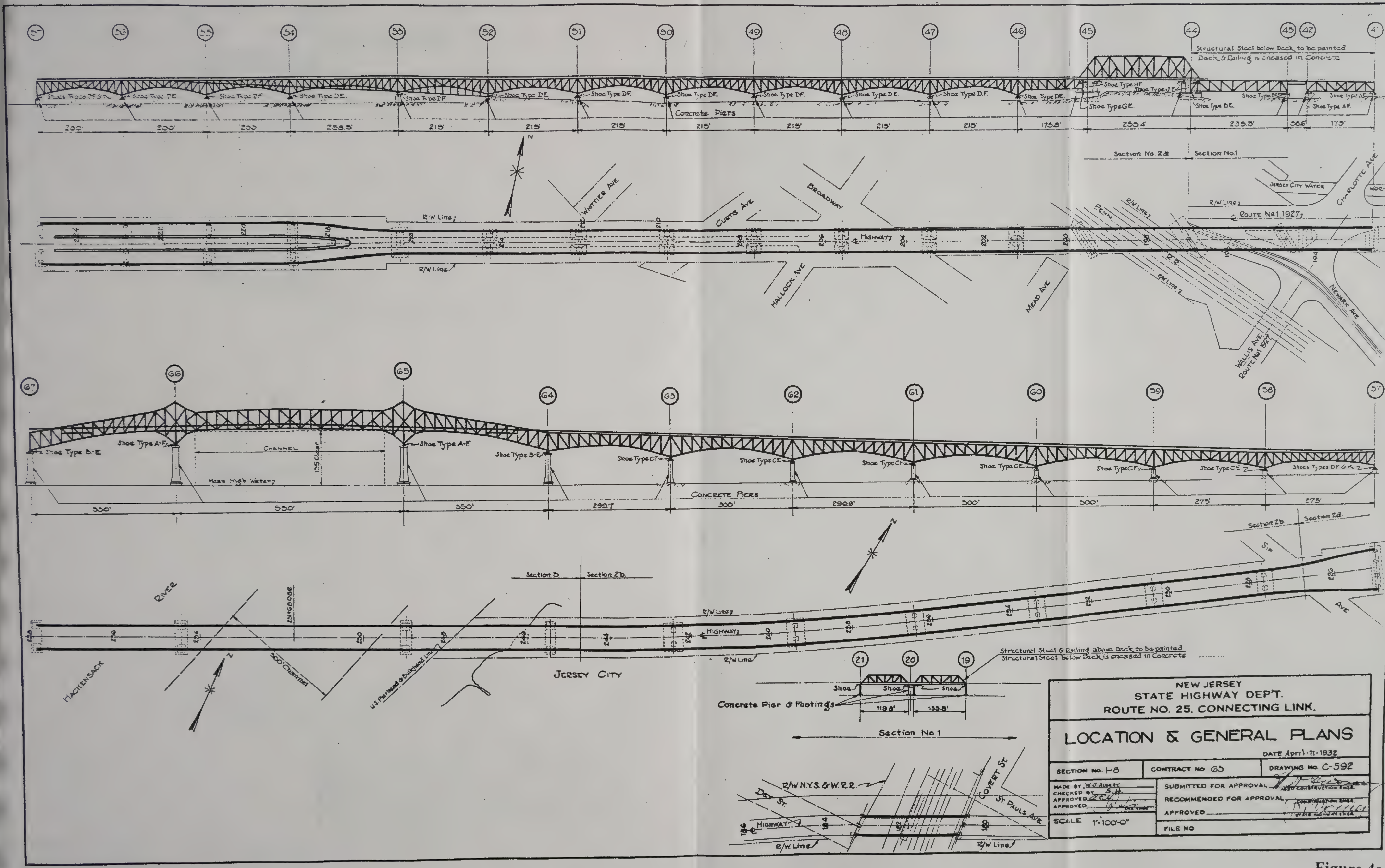
DATE April-11-1932

TION NO. 1-8
CONTRACT NO 63
DRAWING NO. C-592

BY W J ALBERT
CKED BY S.H.
ROVED ZEH
ROVED
LE 1"-100'-0"

SUBMITTED FOR APPROVAL ASST CONSTRUCTION ENGR.
RECOMMENDED FOR APPROVAL CONSTRUCTION ENGR.
APPROVED STATE HIGHWAY ENGR.
FILE NO

Figure 4a


Structural Steel below Deck to be painted
Deck & Railing is encased in Concrete
Shoe Type DE
Shoe Type DF
Shoe Type HF
Shoe Type JF
Shoe Type GE
Shoe Type AF
Concrete Piers
Section No. 2a
Section No. 1
Whittier Ave
Curtis Ave
Broadway
Hallock Ave
Mead Ave
Penn. R.R.
Jersey City Water Works
Charlotte Ave
Route No 1, 1927
Newark Ave
Wallis Ave Route No 1 1927
R/W Line
Highway
Shoe Type B-E
Shoe Type A-F
Channel
135' Clear
Mean High Water
Shoe Type CF
Shoe Type CE
Shoes Types DF & K
Concrete Piers
Section 2b
Section 2a
Section 3
Hackensack
River
300' Channel
U.S. Pierhead & Bulkhead Line
Jersey City
Structural Steel & Railing above Deck to be painted
Structural Steel below Deck is encased in Concrete
Concrete Pier & Footings
Shoe
Section No. 1
R/W N.Y.S. & W. R.R.
Dey St.
Covert St.
St. Pauls Ave
Ave

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 25. CONNECTING LINK.

LOCATION & GENERAL PLANS

DATE April-11-1932

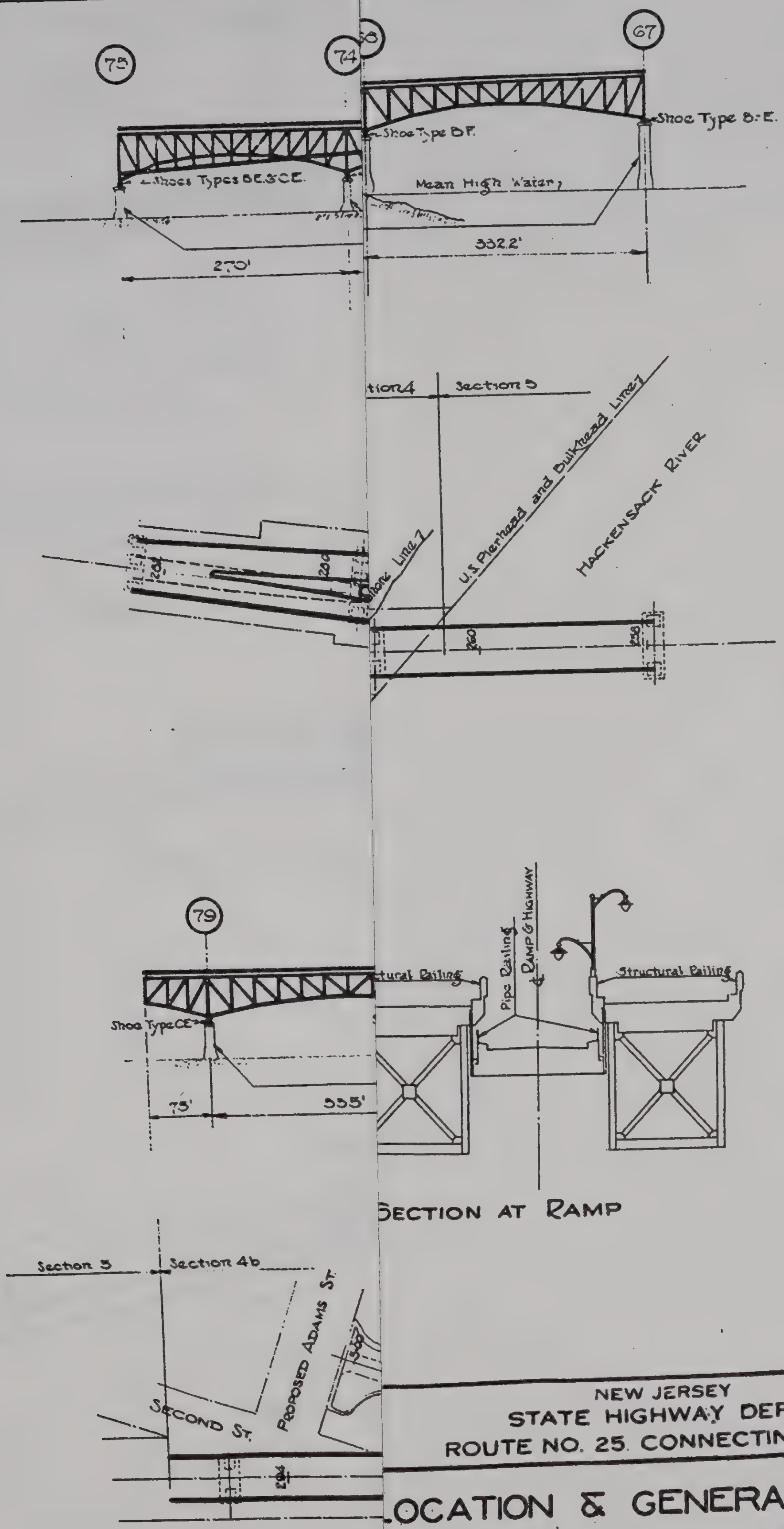
SECTION NO. 1-8
CONTRACT NO 63
DRAWING NO. C-592

MADE BY W. J. ALBERT
CHECKED BY S. H.
APPROVED
APPROVED

SUBMITTED FOR APPROVAL
ASST. CONSTRUCTION ENGR.
RECOMMENDED FOR APPROVAL
CONSTRUCTION ENGR.
APPROVED
STATE HIGHWAY ENGR.

SCALE 1"=100'-0"
FILE NO

Figure 4a


75
74
68
67
Shoes Types BE.&CE.
Shoe Type BF.
Shoe Type B-E.
Mean High Water
270'
332.2'
tion 4
Section 5
Shore Line
U.S. Pierhead and Bulkhead Line
HACKENSACK RIVER
79
Shoe Type CE
73'
335'
Structural Railing
Pipe Railing
Ramp & Highway
Structural Railing
SECTION AT RAMP
Section 5
Section 4b
PROPOSED ADAMS ST.
SECOND ST.

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 25. CONNECTING LINK.

LOCATION & GENERAL PLANS

DATE April-11-1932

ION No. 1-8
CONTRACT No. 63
DRAWING No. C-593

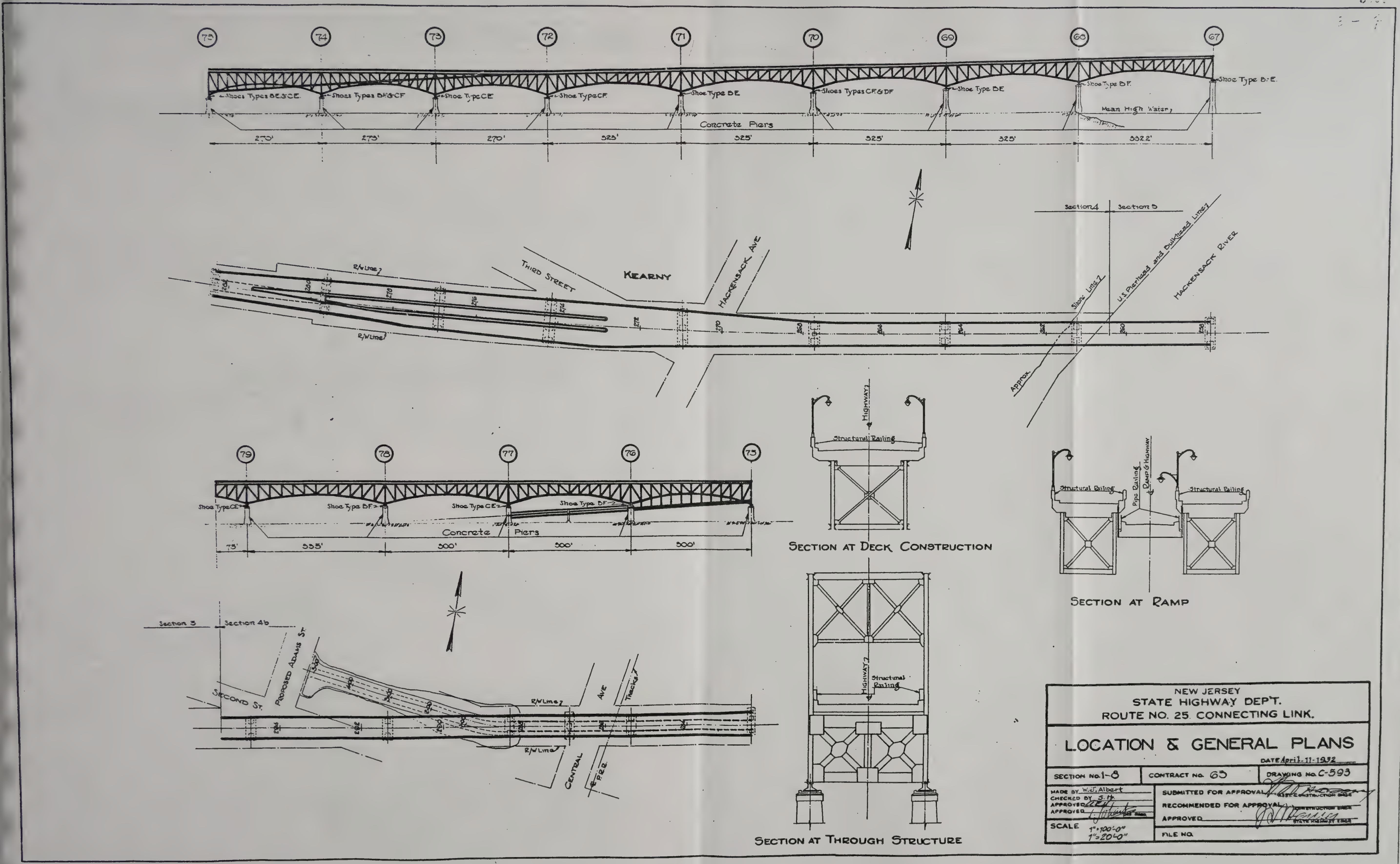
BY W.J. Albert
ED BY S.H.
VED
VED

SUBMITTED FOR APPROVAL ASST. CONSTRUCTION ENGR.
RECOMMENDED FOR APPROVAL CONSTRUCTION ENGR.
APPROVED STATE HIGHWAY ENGR.

E 1" = 100'-0"
1" = 20'-0"

FILE NO.

Figure 4b


75
74
73
72
71
70
69
68
67
Shoes Types BE&CE
Shoes Types BF&CF
Shoe Type CE
Shoe Type CF
Shoe Type BE
Shoes Types CF&DF
Shoe Type BE
Shoe Type BF
Shoe Type B-E
Mean High Water
Concrete Piers
270'
275'
270'
325'
325'
325'
325'
332.2'
Section 4
Section 5
R/W Line
R/W Line
Third Street
Kearny
Hackensack Ave
Shore Line
U.S. Pierhead and Bulkhead Lines
Hackensack River
Approx.
79
78
77
76
75
Shoe Type CE
Shoe Type BF
Shoe Type CE
Shoe Type BF
Concrete Piers
75'
335'
300'
300'
300'
Highway
Structural Railing
Section at Deck Construction
Structural Railing
Pipe Railing
Ramp & Highway
Structural Railing
Section at Ramp
Section 5
Section 4b
Second St.
Proposed Adams St.
R/W Line
Ave
Tracks
R/W Line
Central
P.R.R.
Highway
Structural Railing
Section at Through Structure

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 25. CONNECTING LINK.

LOCATION & GENERAL PLANS

DATE April-11-1932

SECTION NO. 1-8
CONTRACT NO. 65
DRAWING NO. C-593

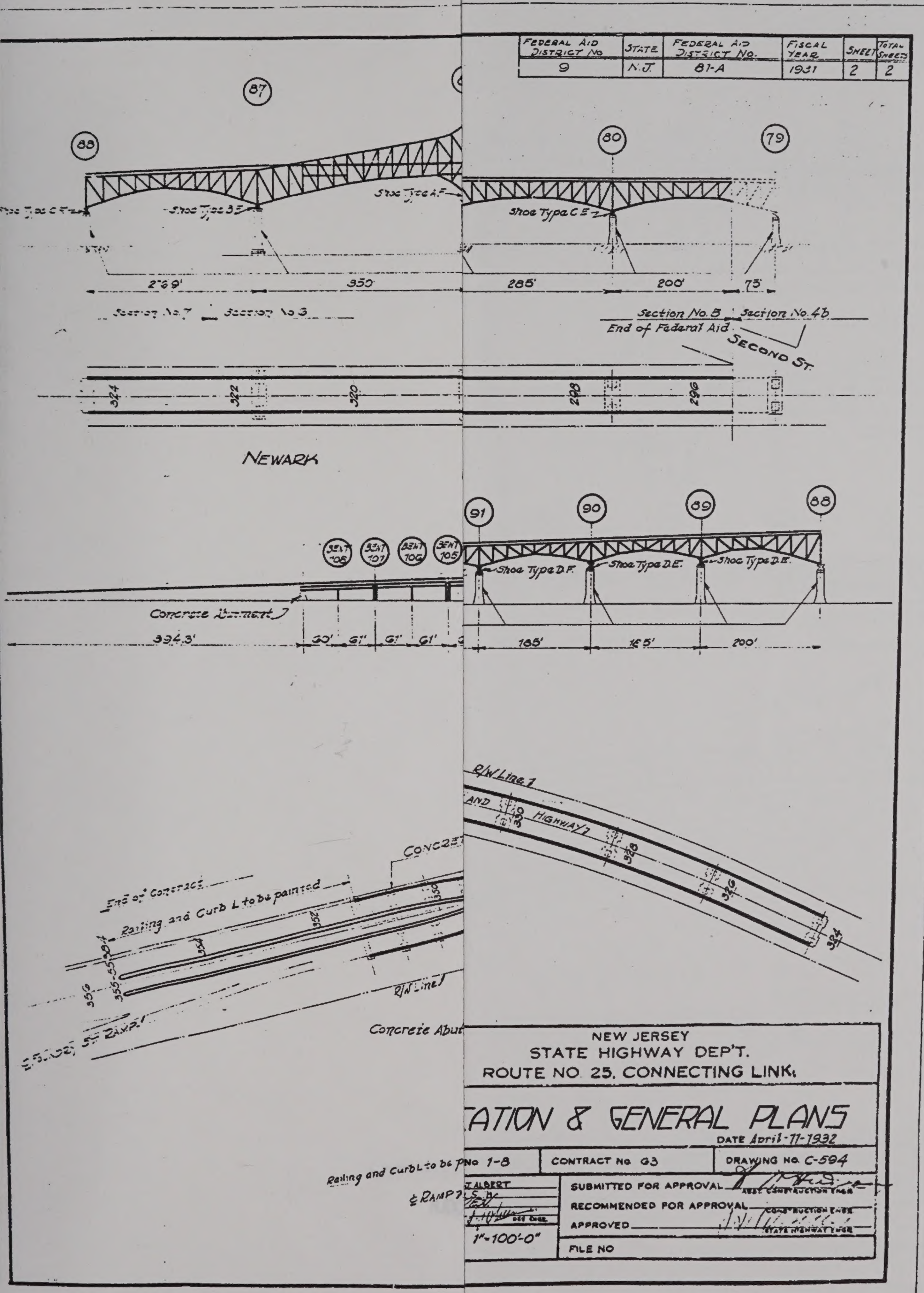
MADE BY W.J. Albert
CHECKED BY S.H.
APPROVED
APPROVED

SUBMITTED FOR APPROVAL
RECOMMENDED FOR APPROVAL
APPROVED

SCALE 1"=100'-0"
1"=20'-0"

FILE NO.

Figure 4b


87
88
80
79
Shoe Type B E
Shoe Type A F
Shoe Type C E
269'
350'
285'
200'
75'
Section No. 7
Section No. 3
Section No. B
Section No. 4b
End of Federal Aid
SECOND ST.
324
322
320
298
296
NEWARK
91
90
89
88
BENT 108
BENT 107
BENT 106
BENT 105
Shoe Type D.F.
Shoe Type D.E.
Shoe Type D.E.
Concrete Abutment
394.3'
50'
61'
61'
61'
185'
185'
200'
R/W Line
AND HIGHWAY
330
328
326
324
CONCRETE
End of Contract
Railing and Curb L to be painted
350
352
354
355-55
356
R/W Line
Concrete Abut
ST. RAMP
Railing and Curb L to be P

FEDERAL AID DISTRICT No	STATE	FEDERAL AID DISTRICT No.	FISCAL YEAR	SHEET	TOTAL SHEETS
9	N.J.	81-A	1931	2	2

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 25. CONNECTING LINK.

ATION & GENERAL PLANS

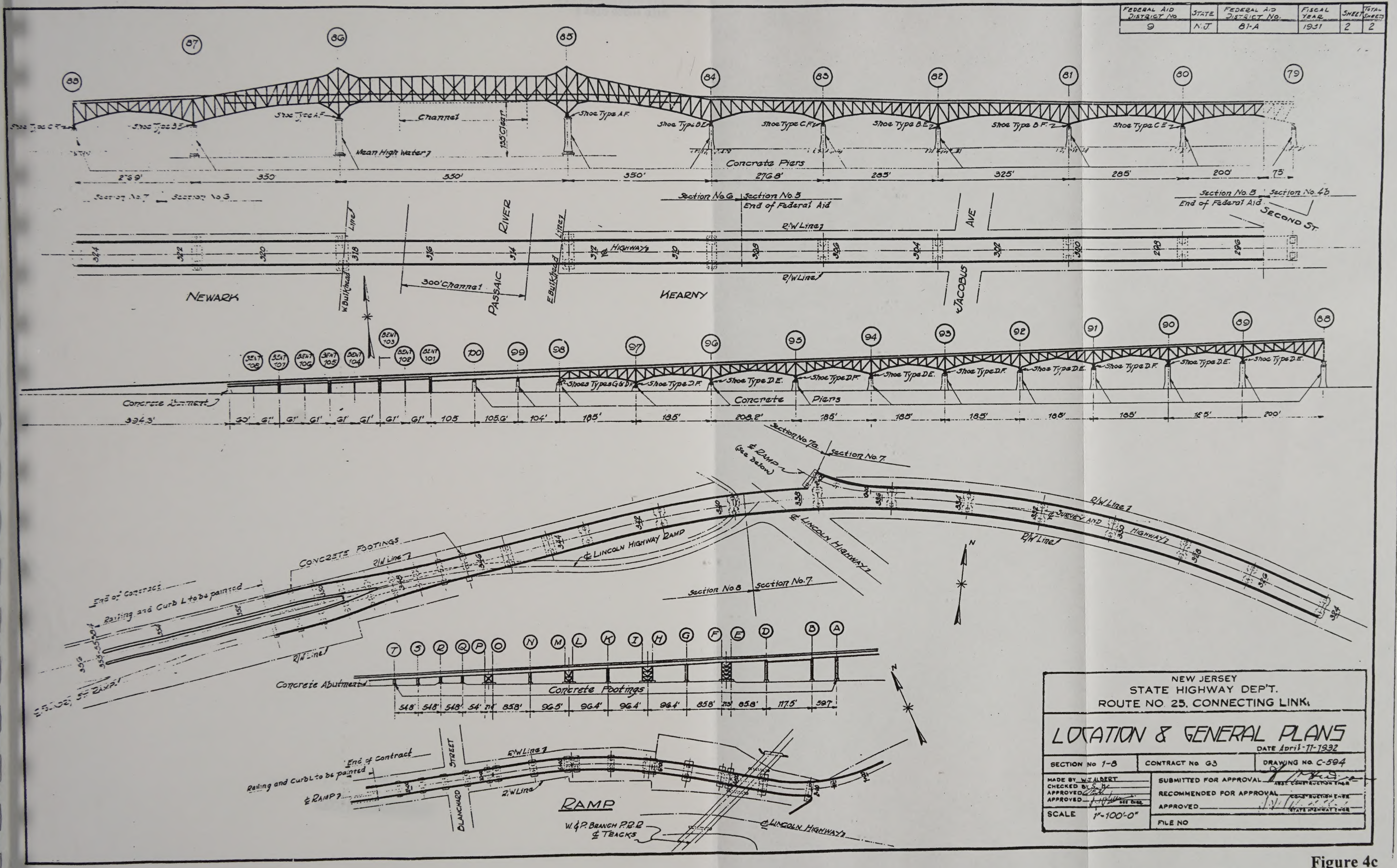
DATE April-11-1932

No 1-8
CONTRACT No. G3
DRAWING No. C-594

J. ALBERT
L.S. H.
DES. ENGR.
1"-100'-0"

SUBMITTED FOR APPROVAL ________ ASST. CONSTRUCTION ENGR.
RECOMMENDED FOR APPROVAL ________ CONSTRUCTION ENGR.
APPROVED ________ STATE HIGHWAY ENGR.
FILE NO

Figure 4c


88
87
86
85
84
83
82
81
80
79
Shoe Type C.F.
Shoe Type B.E.
Shoe Type A.F.
Channel
135' Clear
Mean High Water
Shoe Type A.F.
Shoe Type B.E.
Shoe Type C.F.
Shoe Type B.E.
Shoe Type B.F.
Shoe Type C.E.
Concrete Piers
2'6.9'
350
350'
350'
276.8'
285'
325'
285'
200'
75'
Section No. 7
Section No. 3
Section No. 6
Section No. 5
End of Federal Aid
Section No. 8
Section No. 4B
End of Federal Aid
Second St.
W. Bulkhead Line
River
E. Bulkhead Line
R/W Line
Ave
Highway
R/W Line
324
322
320
318
316
314
312
310
308
306
304
302
300
298
296
300' Channel
Passaic
Jacobus
Newark
Kearny
Bent 103
Bent 108
Bent 107
Bent 106
Bent 105
Bent 104
Bent 102
Bent 101
100
99
98
97
96
95
94
93
92
91
90
89
88
Shoes Types G & D.F.
Shoe Type D.F.
Shoe Type D.E.
Shoe Type D.F.
Shoe Type D.E.
Shoe Type D.F.
Shoe Type D.E.
Shoe Type D.F.
Shoe Type D.E.
Shoe Type D.E.
Concrete Abutment
Concrete Piers
394.3'
30'
61'
61'
61'
61'
61'
61'
61'
105
105.6'
104'
185'
185'
208.2'
185'
185'
185'
185'
185'
185'
200'
Section No. 7a
Section No. 7
℄ Ramp (See Below)
℄ Lincoln Highway
℄ Lincoln Highway Ramp
Concrete Footings
R/W Line
End of Contract
Railing and Curb L to be painted
R/W Line
℄ Survey and Highway
R/W Line
R/W Line
Section No. 8
Section No. 7
N
356
354
352
350
348
346
344
342
340
338
336
334
332
330
328
326
324
℄ Second St. Ramp
T S R Q P O N M L K I H G F E D B A
Concrete Abutment
Concrete Footings
54.8'
54.8'
54.8'
54'
7.4'
85.8'
96.5'
96.4'
96.4'
96.4'
85.8'
7.5'
85.8'
117.5'
59.7'
N
End of Contract
Railing and Curb L to be painted
℄ Ramp
Blanchard
Street
R/W Line
R/W Line
Ramp
W. & P. Branch P.R.R. ℄ Tracks
℄ Lincoln Highway

Federal Aid District No	State	Federal Aid District No.	Fiscal Year	Sheet	Total Sheets
9	N.J.	81-A	1931	2	2

NEW JERSEY
STATE HIGHWAY DEP'T.
ROUTE NO. 25. CONNECTING LINK.

LOCATION & GENERAL PLANS

DATE April-11-1932

SECTION No 1-8
CONTRACT No G3
DRAWING No C-594

MADE BY W.J. ALBERT
CHECKED BY S. Mc
APPROVED
APPROVED ___ BR. ENGR.
SCALE 1"-100'-0"

SUBMITTED FOR APPROVAL ___ ASST. CONSTRUCTION ENGR.
RECOMMENDED FOR APPROVAL ___ CONSTRUCTION ENGR.
APPROVED ___ STATE HIGHWAY ENGR.
FILE NO

Figure 4c

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Bloomfield, New Jersey 07003
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